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T-D

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/423,746	11/15/99	FAGIOLINI	N 32232-152197

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IM52/0517

EXAMINER

VANDY, T

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 05/17/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09-423,746

Applicant(s)

FAGIOLINI

Examiner

VANOY

Group Art Unit

1754

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- DATED** MARCH 19, 2001
- ☒ Responsive to communication(s) filed on MARCH 19, 2001
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-11 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-11 is/are rejected.
- ☒ Claim(s) 6 AND 11 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Oath/Declaration

nl The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because it makes no reference to the parent application, PCT/EP98/02828 filed 05/07/98, for this filing under 35 U.S.C. 371.

Claim Objections

nl a) In claim 6 line 2, the term ("in accordance with" claim 1) does not require that the composition of claim 1 be used to purify the gas. The substitution of --of-- in lieu of "in accordance with" would resolve this issue.

nl b) New claim 10 submitted in the Amendment dated Mar. 19, 2001 has been renumbered as claim 11.

nl c) In claim 11, a silica containing less than 0.48% silica is not a silica.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

a) Claim 11 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 11 recites that the amount of silica is less than 0.48% silica. Example 1 in the Applicants' specification sets forth that the composition contains 0.48% silica based on the weight of the sodium bicarbonate. Example 1 does not support the limitation of claim 11.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as their invention.

o/a) In claim 1, the term "substantially" renders the claim indefinite because it is not clear from the specification what the metes and bounds are of "substantially". The comment set forth on pg. 4 lines 5-18 in the specification is noted, but raises the question of how much silica can the composition contain before it exerts a perceptible influence on the caking of the sodium bicarbonate.

The Applicants argue that the USPTO has proffered no evidence or reason that the language "substantially devoid" is inconsistent with its ordinary meaning. Claim 10 quantifies the amount of silica in the reagent.

The rejection is maintained because the claim boundaries of "substantially devoid" are not known or recited. A composition containing 0.48 weight percent silica is not "substantially devoid" of silica. The claim language raises the question of how much or how little silica can be present in the composition before it is considered to be "substantially devoid".

b) Claim 11 does not particularly point out and distinctly set forth what the percent of silica is relative to. Amending claim 11 by inserting --relative to the weight of the sodium bicarbonate-- between "silica" and "." would resolve this issue (as supported in Applicants' Example 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The person having "ordinary skill in the art" has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The references of record in this application reasonably reflect this level of skill.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. The Applicants are advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent Doc. No. DE 41 00 645 A1 to Regler et al.

The English abstract of the Regler et al. application discloses a method for removing sulfur dioxide and hydrogen chloride out of a gas by contacting the gas with a reagent comprising:

- (1) what appears to be at least one component to include NaHCO_3 ; MgO , $\text{Mg}(\text{OH})_2$, etc. . ., and
- (2) an activated charcoal or coke (especially lignite), so that (evidently) the reagent reacts with the sulfur dioxide and hydrogen chloride in the gas to produce a cleaned gas

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and reaction products, and then (evidently) the reaction products are filtered out of the gas.

The difference between the Applicants' claims and the Regler et al. application is that the Applicants' claims call for using a combination of the sodium bicarbonate and the magnesium compound (whereas, evidently, Regler et al. sets forth the use of a plurality of reagents with the same sodium bicarbonate and magnesium compound being among them), however it is submitted that this difference would have been obvious to one of ordinary skill in the art at the time the invention was made because the recitation of the same species in the Markush grouping of species in the English abstract of the Regler et al. application renders obvious the use of any combination of the recited species for the same purpose taught in the Regler et al. application.

The limitations of Applicants' claim 11 are noted but are submitted to be obvious from pg. 5 lines 5 and 6 in the English translation of DE 41 00 645 A1 which discloses that the amount of "surface active agent" (which may be silica: please also see pg. 4, 4th full paragraph in the English translation of DE 41 00 645 A1) ranges from 0.1 to 95% (which embraces the "0.48%" of Applicants' Example 1 and "less than 0.48%" of Applicants' claim 11).

Response to Arguments

Applicants' arguments submitted in their Amendment dated Mar. 19, 2001, which has been filed as paper no. 8, have been fully considered but they are not persuasive.

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a) *The Applicants argue their invention is intended to solve an agglutination problem, whereas Regler (i. e. DE 41 00 645 A1) does not mention or suggest an agglutination problem.*

There is no requirement that DE 41 00 645 A1 must recognize any undisclosed deficiencies or provide any undisclosed additional advantages of at least an obvious variation of the same claimed process and same claimed composition in order for a case of prima facie obviousness to be established: please see section section 2145(II) in the MPEP (Rev. 1, Feb. 2000) for additional details.

b) *The Applicants argue that in order to reconstruct Applicants' invention from DE 41 00 645, one skilled in the art must operate selective selections.*

It appears that the Applicants are arguing that there is no motivation to make the selection of the particular species (set forth in the Applicants' claims) out of the plurality of species disclosed in the Markush-type groups in DE 41 00 645 A1, but this type of argument was not found persuasive in the decision reached in the *In re Petering*, 301 F.2d 676, 681, 133 USPQ 275, 280 court decision where it was determined that the selection of a particular species out of a group of 20 species was obvious because "one skilled in [the] art would . . . envisage each member" of the genus: please see the discussion of this court decision set forth in section 2144.08 (II) (A) (4) (a) in the MPEP (Rev. 1, Feb. 2000), particularly pg. 2100-112 for further details.

c) *The Applicants argue that the Regler composition contains silica, whereas the Applicants have discovered the negative effects of silica for the agglutination problem. The Applicants' claim recites that the composition is substantially devoid of silica.*

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The amount of "surface active agent" (which may be silica: please also see pg. 4, 4th full paragraph in the English translation of DE 41 00 645 A1) ranges from 0.1 to 95% which embraces the "0.48%" of silica of Applicants' Example 1 and "less than 0.48%" silica limitation of Applicants' claim 11. To the same degree that the Applicants' composition is "substantially devoid" of silica, so is the composition of DE 41 00 645 A1.

Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to Timothy C. Vanoy at telephone number 703-308-2540.

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	<i>TV</i>
Timothy Vanoy/tv	Timothy Vanoy
17 Oct. 2000	Patent Examiner
10 May 2001	Art Unit 1754

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